

PURCHASING DEPARTMENT  
581 Plains Road, Suite 3, Kingston, RI 02881 USA p: 401.874.2171 f: 401.874.2306 uri.edu/purchasing



## BID/PROPOSAL

COMMODITY: BEARINGS DATE: 3/20/2014

FORMAL BID NO. \_\_\_\_\_ PUBLIC BID NO. 2472 RFP NO. \_\_\_\_\_

BIDS ARE TO BE RECEIVED IN URI PURCHASING DEPARTMENT BY: DATE: 4/9/2014 TIME: 3:00 PM

BUYER: **TRACEY ANGELL / MSC**  SURETY REQUIRED: YES: \_\_\_\_\_ NO: X

PRE-BID/PROPOSAL CONFERENCE: DATE: \_\_\_\_\_ TIME: \_\_\_\_\_

MANDATORY: YES: \_\_\_\_\_ NO: \_\_\_\_\_

LOCATION: \_\_\_\_\_

BE SURE ALL INFORMATION SHOWN BELOW IS CORRECT.  
FEDERAL EMPLOYER IDENTIFICATION NUMBER MUST BE INCLUDED.

COMPANY NAME: \_\_\_\_\_ FEIN: \_\_\_\_\_

STREET AND NUMBER: \_\_\_\_\_

CITY, STATE & ZIP CODE: \_\_\_\_\_

ORDERING E-MAIL ADDRESS: \_\_\_\_\_

**No offer will be considered that is not accompanied by the attached  
University of Rhode Island Bidder Certification Form/Contract Offer  
completed and signed by the offeror.**

Print Name and Title \_\_\_\_\_

Telephone Number/Facsimile Number \_\_\_\_\_

Signature \_\_\_\_\_

Date \_\_\_\_\_

Company F.E.I.N. \_\_\_\_\_

**THIS BID WILL NOT BE HONORED UNLESS SIGNED**

*The University of Rhode Island is an equal opportunity employer committed to the principles of affirmative action.*

## University of Rhode Island Bidder Certification Form

ALL OFFERS ARE SUBJECT TO THE REQUIREMENTS, PROVISIONS AND PROCEDURES CONTAINED IN THIS CERTIFICATION FORM. Offerors are expected to read, sign and comply with all requirements. Failure to do so may be grounds for disqualification of the offer contained herein.

### Rules for Submitting Offers

This Certification Form must be attached in its entirety to the front of the offer and shall be considered an integral part of each offer made by a vendor to enter into a contract with the University of Rhode Island. As such, submittal of the entire Bidder Certification Form, signed by a duly authorized representative of the offeror attesting that he/she (1) has read and agrees to comply with the requirements set forth herein and (2) to the accuracy of the information provided and the offer extended, is a mandatory part of any contract award.

To assure that offers are considered on time, each offer must be submitted with the specific Bid/RFP/LOI number, date and time of opening marked in the upper left hand corner of the envelope. Each bid/offer must be submitted in separate sealed envelopes.

A complete signed (in ink) offer package must be delivered to the University of Rhode Island Purchasing Office by the time and date specified for the opening of responses in a sealed envelope.

Bids must be submitted on the URI bid solicitation forms provided, indicating brand and part numbers of items offered, as appropriate. Bidders must submit detailed cuts and specs on items offered as equivalent to brands requested WITH THE OFFER. Bidders must be able to submit samples if requested.

Documents misdirected to other State locations or which are not present in the University of Rhode Island Purchasing Office at the time of opening for whatever cause will be deemed to be late and will not be considered. For the purposes of this requirement, the official time and date shall be that of the time clock in the reception area of the University of Rhode Island Purchasing Office. Postmarks shall not be considered proof of timely submission.

RIVIP SOLICITATIONS. To assure maximum access opportunities for users, public bid/RFP solicitations shall be posted on the RIVIP for a minimum of seven days and no amendments shall be made within the last five days before the date an offer is due. Except when access to the Web Site has been severely curtailed and it is determined by the Purchasing Agent that special circumstances preclude extending a solicitation due date, requests to mail or fax hard copies of solicitations will not be honored. When the result of an internet solicitation is unsuccessful, the University of Rhode Island will cancel the original solicitation and resolicit the original offer directly from vendors.

PRICING. Offers are irrevocable for sixty (60) days from the opening date (or such other extended period set forth in the solicitation), and may not be withdrawn, except with the express permission of the University Purchasing Agent. All pricing will be considered to be firm and fixed unless otherwise indicated. The University of Rhode Island is exempt from Federal excise taxes and State Sales and Use Taxes. Such taxes shall not be included in the bid price. PRICES QUOTED ARE FOB DESTINATION.

DELIVERY and PRODUCT QUALITY. All offers must define delivery dates for all items; if no delivery date is specified, it is assumed that immediate delivery from stock will be made. The contractor will be responsible for delivery of materials in first class condition. Rejected materials will be at the vendor's expense.

PREVAILING WAGE, OSHA SAFETY TRAINING and APPRENTICESHIP REQUIREMENTS. Bidders must comply with the provisions of the Rhode Island labor laws, including R.I. Gen. Laws §§ 37-13-1 et seq. and occupational safety laws, including R.I. Gen. Laws §§ 28-20-1 et seq. These laws mandate for public works construction projects the payment of prevailing wage rates, the implementation and maintenance of occupational safety standards, and for projects with a minimum value of \$1 Million, the employment of apprentices. The successful Bidder must submit certifications of compliance with these laws from each of its subcontractors prior to their commencement of any work. Prevailing wage rates, apprenticeship requirements, and other workforce and safety regulations are accessible at [www.dlt.ri.gov](http://www.dlt.ri.gov).

PUBLIC RECORDS. Offerors are advised that all materials submitted to the University for consideration in response to this solicitation will be considered without exception to be Public Records pursuant to Title 38 Chapter 2 of the Rhode Island General Laws, and will be released for inspection immediately upon request once an award has been made. Offerors are encouraged to attend public bid/RFP openings to obtain information; however, bid/RFP response summaries may be reviewed after award(s) have been made by visiting the Rhode Island Vendor Information Program (RIVIP) at [www.purchasing.ri.gov](http://www.purchasing.ri.gov), Bidding Opportunities +, Other RI Bid Opportunities or appearing in person at the University of Rhode Island Purchasing Office Mondays through Fridays between 8:30 am – 3:30 pm. Telephone requests for results will not be honored. Written requests for results will only be honored if the information is not available on the RIVIP.

Award will be made to the responsive and responsible offeror quoting the lowest net price in accordance with specifications, for any individual item(s), for major groupings of items, or for all items listed, at the University's sole option.

**BID SURETY.** Where bid surety is required, bidder must furnish a bid bond or certified check for 5% of the bid total with the bid, or for such other amount as may be specified. Bids submitted without a required bid surety will not be considered.

**SPECIFICATIONS.** Unless specified "no substitute", product offerings equivalent in quality and performance will be considered (at the sole option of the University) on the condition that the offer is accompanied by detailed product specifications. Offers which fail to include alternate specifications may be deemed nonresponsive.

**VENDOR AUTHORIZATION TO PROCEED.** When a purchase order, change order, contract/agreement or contract/agreement amendment is issued by the University of Rhode Island, no claim for payment for services rendered or goods delivered contrary to or in excess of the contract terms and scope shall be considered valid unless the vendor has obtained a written change order or contract amendment issued by the University of Rhode Island Purchasing Office PRIOR to delivery.

Any offer, whether in response to a solicitation for proposals or bids, or made without a solicitation, which is accepted in the form of an order OR pricing agreement made in writing by the University of Rhode Island Purchasing Office, shall be considered a binding contract.

**REGULATIONS, GENERAL TERMS AND CONDITIONS GOVERNING STATE AND BOARD OF GOVERNORS FOR HIGHER EDUCATION CONTRACTS.** This solicitation and any contract or purchase order arising from it are issued in accordance with the specific requirements described herein, and the State's Purchasing Laws and Regulations and other applicable State Laws, including the Board of Governors for Higher Education General Terms and Conditions of Purchase. The regulations, General Terms and Conditions are incorporated into all University of Rhode Island contracts and can be viewed at: [www.righe.org/procurementregs113006.pdf](http://www.righe.org/procurementregs113006.pdf) and [www.purchasing.ri.gov](http://www.purchasing.ri.gov).

**ARRA SUPPLEMENTAL TERMS AND CONDITIONS.** Contracts and sub-awards funded in whole or in part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto, such contracts and sub-awards shall be subject to the Supplemental Terms and Conditions for Contracts and Sub-awards funded in whole or in part by the American Recovery and Reinvestment Act of 2009. Pub.L.No. 111-5 and any amendments thereto located on the Division of Purchases website at [www.purchasing.ri.gov](http://www.purchasing.ri.gov).

**EQUAL EMPLOYMENT OPPORTUNITY.** Compliance certificate and agreement procedures will apply to all awards for supplies or services valued at \$10,000 or more. Minority Business Enterprise policies and procedures, including subcontracting opportunities as described in Title 37 Chapter 14.1 of the Rhode Island General Laws also apply.

**PERFORMANCE BONDS.** Where indicated, successful bidder must furnish a 100% performance bond and labor and payment bond for contracts subject to Title 37 Chapters 12 and 13 of the Rhode Island General Laws. All bonds must be furnished by a surety company authorized to conduct business in the State of Rhode Island. Performance bonds must be submitted within 21 calendar days of the issuance of a tentative notice of award.

**DEFAULT and NON-COMPLIANCE** Default and/or non-compliance with the requirements and any other aspects of the award may result in withholding of payment(s), contract termination, debarment, suspension, or any other remedy necessary that is in the best interest of the state/University of Rhode Island.

**COMPLIANCE** Vendor must comply with all applicable federal, state and local laws, regulations and ordinances.

**SPRINKLER IMPAIRMENT AND HOT WORK.** The Contractor agrees to comply with the practices of the State's Insurance carrier for sprinkler impairment and hot work. Prior to performing any work, the Contractor shall obtain the necessary information for compliance from the Risk Management Office at the Department of Administration or the Risk Management Office at the University of Rhode Island.

Each bid proposal for a *public works project* must include a "public copy" to be available for public inspection upon the opening of bids. **Bid Proposals that do not include a copy for public inspection will be deemed nonresponsive.**

For further information on how to comply with this statutory requirement, see R.I. Gen. Laws §§ 37-2-18(b) and (j). Also see State of Rhode Island Procurement Regulation 5.11 at <http://purchasing.ri.gov/rulesandregulations/rulesandregulations.aspx>.

**ALL CONTRACT AWARDS ARE SUBJECT TO THE FOLLOWING DISCLOSURES & CERTIFICATIONS**

Offerors must respond to every disclosure statement. A person authorized to enter into contracts must sign the offer and attest to the accuracy of all statements.

**Indicate Yes (Y) or No (N):**

\_\_\_\_ 1 State whether your company, or any owner, stockholder, officer, director, member, partner, or principal thereof, or any subsidiary or affiliated company, has been subject to suspension or debarment by any federal, state, or municipal government agency, or the subject of criminal prosecution, or convicted of a criminal offense with the previous five (5) years. If so, then provide details below.

\_\_\_\_ 2 State whether your company, or any owner, stockholder, officer, director, member, partner, or principal thereof, or any subsidiary or affiliated company, has had any contracts with a federal, state or municipal government agency terminated for any reason within the previous five (5) years. If so, then provide details below.

\_\_\_\_ 3 State whether your company or any owner, stockholder, officer, director, member, partner, or principal thereof, or any subsidiary or affiliated company, has been fined more than \$5000 for violation(s) of Rhode Island environmental laws by the Rhode Island Department of Environmental Management within the previous five (5) years. If so, then provide details below.

\_\_\_\_ 4 I/we certify that I/we will immediately disclose, in writing, to the University Purchasing Agent any potential conflict of interest which may occur during the course of the engagement authorized pursuant to this contract.

\_\_\_\_ 5 I/we acknowledge that, in accordance with (1) Chapter §37-2-54(c) of the Rhode Island General Laws "no purchase or contract shall be binding on the state or any agency thereof unless approved by the Department [of Administration] or made under general regulations which the Chief Purchasing Officer may prescribe," and (2) RIGL section §37-2-7(16) which identifies the Board of Governors for Higher Education as a public agency and gives binding contractual authority to the University Purchasing Agent, including change orders and other types of contracts and under State Purchasing Regulation 8.2.1.1.2 any alleged oral agreement or arrangements made by a bidder or contractor with any agency or an employee of the University of Rhode Island may be disregarded and shall not be binding on the University of Rhode Island.

\_\_\_\_ 6 I/we certify that I or my/our firm possesses all licenses required by Federal and State laws and regulations as they pertain to the requirements of the solicitation and offer made herein and shall maintain such required license(s) during the entire course of the contract resulting from the offer contained herein and, should my/our license lapse or be suspended, I/we shall immediately inform the University of Rhode Island Purchasing Agent in writing of such circumstance.

\_\_\_\_ 7 I/we certify that I/we will maintain required insurance during the entire course of the contract resulting from the offer contained herein and, should my/our insurance lapse or be suspended, I/we shall immediately inform the University of Rhode Island Purchasing Agent in writing of such circumstance.

\_\_\_\_ 8 I/we certify that I/we understand that falsification of any information herein or failure to notify the University of Rhode Island Purchasing Agent as certified herein may be grounds for suspension, debarment and/or prosecution for fraud.

\_\_\_\_ 9 I/we acknowledge that the provisions and procedures set forth in this form apply to any contract arising from this offer.

\_\_\_\_ 10 I/we acknowledge that I/we understand the State's Purchasing Laws (§37-2 of the General Laws of Rhode Island) and Purchasing Regulations and General Terms and Conditions available at the Rhode Island Division of Purchases Website (<http://www.purchasing.ri.gov>) and the Board of Governors Website ([www.ribghe.org/procurementregs113006.pdf](http://www.ribghe.org/procurementregs113006.pdf)) apply as the governing conditions for any contract or purchase order I/we may receive from the University of Rhode Island, including the offer contained herein.

\_\_\_\_ 11 I/we certify that the bidder: (i) is not identified on the General Treasurer's list, created pursuant to R.I. Gen. Laws § 37-2.5-3, as a person or entity engaging in investment activities in Iran described in § 37-2.5-2(b); and (ii) is not engaging in any such investment activities in Iran.

\_\_\_\_ 12 If the product is subject to Department of Commerce Export Administration Regulations (EAR) or International Traffic in Arms Regulations (ITAR), please provide the Export Control Classification Number (ECCN) or the US Munitions List (USML) Category: \_\_\_\_\_

\_\_\_\_ 13 I/we certify that the above information is correct and complete.

IF YOU HAVE ANSWERED "YES" TO QUESTIONS #1 – 3 OR IF YOU ARE UNABLE TO CERTIFY YES TO QUESTIONS #4 – 11 and 13 OF THE FOREGOING, PROVIDE DETAILS/EXPLANATION IN AN ATTACHED STATEMENT. INCOMPLETE CERTIFICATION FORMS SHALL BE GROUNDS FOR DISQUALIFICATION OF OFFER.

Signature below commits vendor to the attached offer and certifies (1) that the offer has taken into account all solicitation amendments, (2) that the above statements and information are accurate and that vendor understands and has complied with the requirements set forth herein.

Vendor's Signature: \_\_\_\_\_ Bid Number: \_\_\_\_\_ Date: \_\_\_\_\_  
(Person Authorized to enter into contracts; signature must be in ink) (if applicable)

Print Name and Title of Company official signing offer Telephone Number \_\_\_\_\_

COMMODITY: BEARINGS  
OPENING DATE & TIME: 4/9/14 3:00 PM

ATTACHMENT "A"

ITEM NO.	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	ITEM NO.
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INSTRUCTIONS:

IF BIDDING ON ANY ITEM, THE ENTIRE BID MUST BE RETURNED. THE PRICE COLUMN ON THE RIGHT WILL BE DETACHED TO CREATE A BID TABULATION SPREAD SHEET FOR THE "OFFICIAL BID ANALYSIS". THEREFORE:

- VENDOR NAME MUST APPEAR IN BOTH COLUMNS ON "EVERY" PAGE UNDER THE WORDS "BIDDER"
- PRICE COLUMNS MUST CONTAIN "EXACTLY" THE SAME INFORMATION.
- ANY SUPPLEMENTARY INFORMATION MUST BE REPEATED IN "BOTH" COLUMNS.
- TO ASSURE THAT OFFERS ARE CONSIDERED ON TIME, EACH OFFER MUST BE SUBMITTED WITH SPECIFIC BID/RFP NUMBER (PROVIDED ABOVE), DATE AND TIME OF OPENING MARKED IN THE UPPER LEFT HAND CORNER OF ENVELOPE. EACH BID/ OFFER MUST BE SUBMITTED IN SEPARATE SEALED ENVELOPES:

MAIL TO:	COURIER:
UNIVERSITY OF RHODE ISLAND	UNIVERSITY OF RHODE ISLAND
P.O. BOX 1773	PURCHASING DEPARTMENT
PURCHASING DEPARTMENT	DINING SERVICES DISTRIBUTION CENTER
PLAINS ROAD	581 PLAINS ROAD
KINGSTON, RI 02881	KINGSTON, RI 02881-2010

DOCUMENTS MISDIRECTED TO OTHER STATE LOCATIONS OR WHICH ARE NOT PRESENT IN THE UNIVERSITY OF RHODE ISLAND PURCHASING DEPARTMENT AT THE TIME OF OPENING FOR WHATEVER CAUSE WILL BE DEEMED TO BE LATE AND WILL NOT BE CONSIDERED. FOR THE PURPOSE OF THIS REQUIREMENT, THE OFFICIAL TIME AND DATE SHALL BE THAT OF THE TIME CLOCK IN THE UNIVERSITY OF RHODE ISLAND PURCHASING DEPARTMENT. POSTMARKS SHALL NOT BE CONSIDERED PROOF OF TIMELY SUBMISSION.

FAILURE TO COMPLETE FORM AS INSTRUCTED MAY BE GROUNDS FOR "DISQUALIFICATION".

GROUP PURCHASING ORGANIZATIONS (GPO):

THE UNIVERSITY OF RHODE ISLAND IS A MEMBER OF THE FOLLOWING:

- Educational & Institutional Cooperative Purchasing (E&I)
- Provisita

BIDDER (NAME OF FIRM)

BIDDER (NAME OF FIRM)

BID NO: 2472

BID NO: 2472

COMMODITY: BEARINGS  
 OPENING DATE & TIME: 4/9/14 3:00 PM

ATTACHMENT "A"

SHIP TO:  
 UNIVERSITY OF RHODE ISLAND  
 GSO CENTRAL RECEIVING  
 NARRAGANSETT, RI 02882-1197  
 OCEAN ENGINEERING  
 215 SOUTH FERRY RD., 110 SHEETS BLDG.

BIDDER (NAME OF FIRM)

BIDDER (NAME OF FIRM)

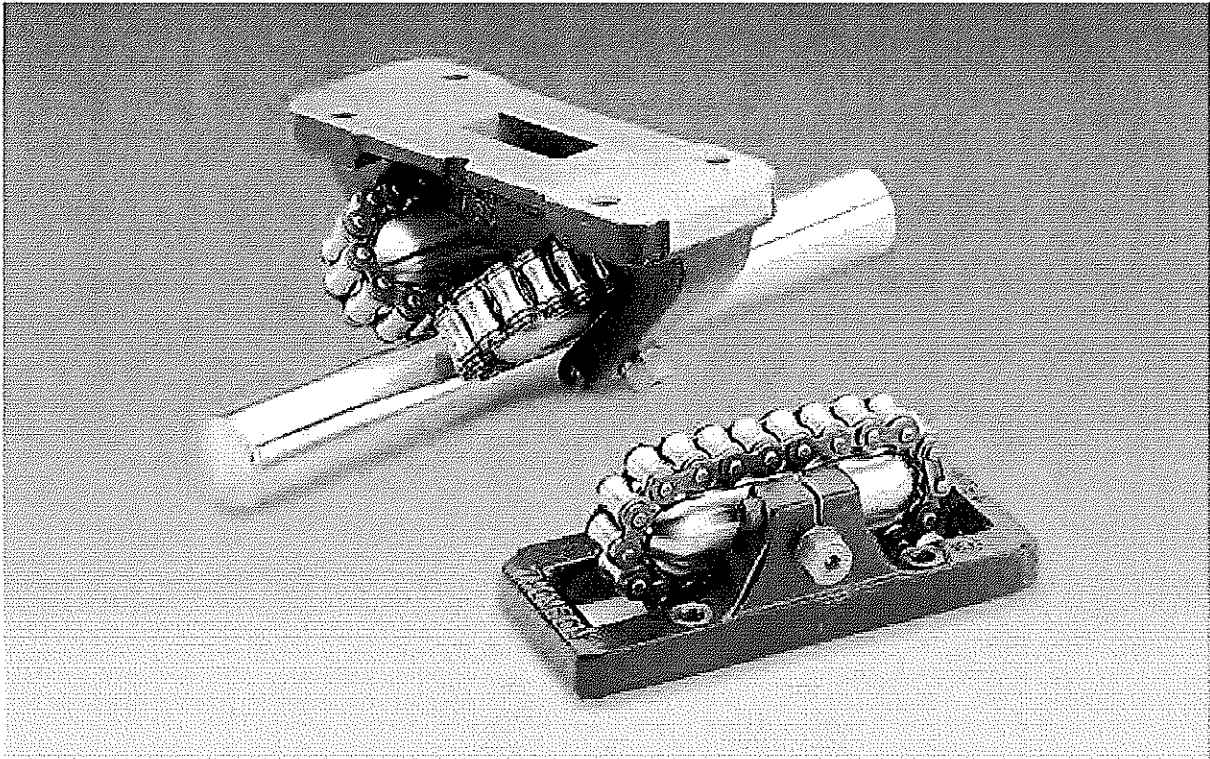
BID NO: 2472

BID NO: 2472

ITEM NO.	DESCRIPTION	QUANTITY	UOM	UNIT PRICE	EXTENDED PRICE	UNIT PRICE	EXTENDED PRICE	ITEM NO.
1	RW16S ROUNDWAY BEARING W/MOUNTING BLOCK	8	EA	\$	\$	\$	\$	1
2	RW16V ROUNDWAY BEARING W/ V MOUNTING BLCI	8	EA	\$	\$	\$	\$	2
3	RS16 ROUNDWAY BEARING SEAL	24	EA	\$	\$	\$	\$	3
4	PB31A BALL BUSHING PILLOW BLOCK	2	EA	\$	\$	\$	\$	4
SPECIFICATIONS ATTACHED.								

## Inch – RoundWay Linear Roller Bearings

### RoundWay Linear Roller Bearing Products



Inch Ball Bearing Bushing

#### Thomson RoundWay Linear Roller Bearings offer:

- Up to twenty times the load capacity of conventional linear ball bearings. This dramatic increase allows for more compact machine designs with a reduction in hardware costs.
- A rigid design that provides high accuracy while tolerating the high shock loads common to machine tool applications.
- A coefficient of friction as low as .005. When replacing v-ways or flat-ways, RoundWay linear roller bearings allow for the use of smaller less expensive drives, motors, belts, gears and ball screws.
- A self-aligning capability that reduces installation time and cost.
- An eccentric trunnion pin that adjusts bearing height to compensate for minor inaccuracies in mounting base flatness or machining accuracy. Installation is quicker and easier than old style, conventional way systems.
- Availability of an integral wiper that protects against contamination while retaining lubrication.
- Interchangeable components for quick, cost-effective machine maintenance. There is no need to scrap the entire way system, a problem with some linear guide products.
- The RoundRail Advantage combined with the self aligning feature, eliminates the need for derating factors commonly seen with linear guides.
- Availability from over 1800 distributors worldwide.

## Inch – RoundWay Linear Roller Bearings

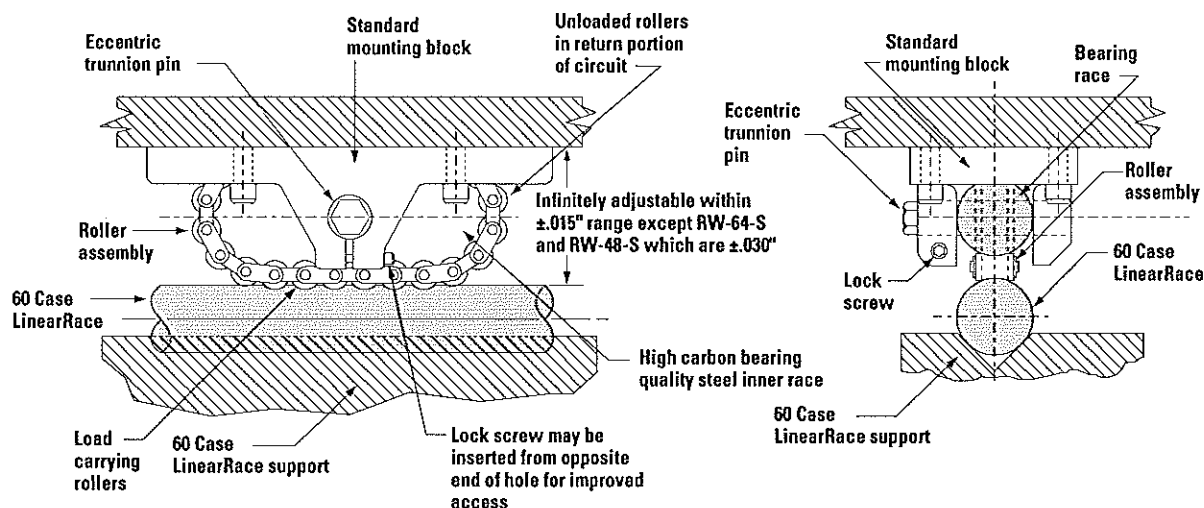


Figure 1

RoundWay Operating Principle

Thomson invented the RoundWay Linear roller bearing for use in high load, heavy duty applications. Each RoundWay bearing combines the high load capacity of hardened and ground steel recirculating rollers with a rigid malleable iron pillow block providing extremely high load capacity with smooth linear travel. The RoundWay linear roller bearing comes in both a single and dual version. A single RoundWay linear roller bearing does not resist side loads and is therefore always used in conjunction with a dual version, unless used in a configuration as shown in Figures 2, 3 and 4 on page 99.

Each RoundWay linear roller bearing is designed for use on 60 Case LinearRace. The 60 Case LinearRace shaft can be continuously supported using type LSR, SR, FLSR or XSR 60 Case LinearRace support rails or intermittently supported using the adjustable Waymount\* LinearRace supports type WM.

The RoundWay linear roller bearing consists of four basic parts: the bearing race, the roller assembly, the eccentric trunnion pin and the mounting block. The rolling elements of a RoundWay linear roller bearing are a series of concave rollers interconnected and linked by a chain assembly. As load is applied to the mounting block it is transferred through the bearing race and roller assembly to the supported 60 Case LinearRace. Connecting the mounting block to the RoundWay bearing and roller assembly is an eccentric trunnion pin that allows the height of the RoundWay linear roller bearing to be adjusted to compensate for variations in the mounting surfaces or the build-up of tolerances between component elements. The eccentric trunnion pin can also be used to preload the RoundWay bearing by eliminating internal bearing clearance. After the eccentric trunnion pin has been adjusted it can be held in place by simply tightening the lock screw.

### Self-Aligning

The RoundWay single and dual bearings are designed with a built-in self-aligning capability that absorbs misalignment caused by inaccuracies in carriage or base machining. The RoundWay single bearing has an additional built-in self-aligning capability that allows it to absorb misalignment caused by two slightly out of parallel 60 Case LinearRace ways. This feature is realized when two RoundWay single bearings are mounted on one 60 Case LinearRace and two dual RoundWay bearings are on a parallel 60 Case LinearRace (Figure 1 on page 99).

\* Trademark of Thomson Industries Inc. Thomson Industries Inc. is registered in the U.S. Patent and Trademark Office and in other countries.



## Inch – RoundWay Linear Roller Bearings

## RoundWay Linear Roller Bearing Mounting Configurations

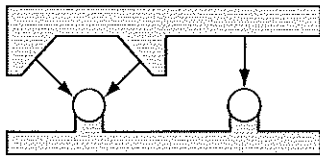


Figure 1

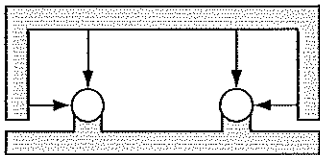


Figure 2

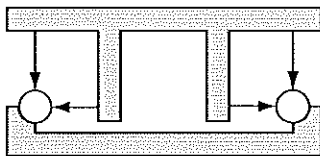


Figure 3

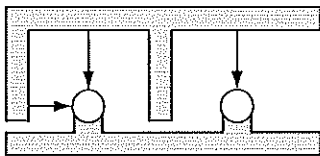


Figure 4

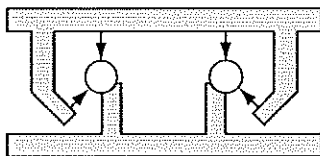


Figure 5

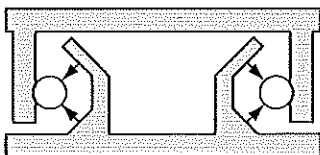


Figure 6

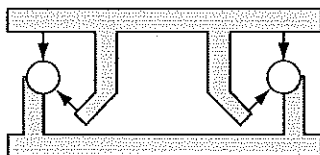


Figure 7

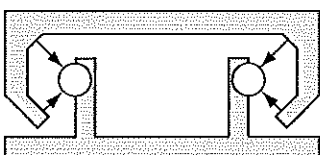


Figure 8

**RoundWay Bearing Mounting Arrangements**

RoundWay bearings are available in single mounting blocks or dual V-blocks. The basic race and roller assembly can be purchased separately, along with the suitable type of trunnion pin for mounting directly in the carriage or other machine elements (see page 113). When using either type of cantilever mounting trunnion pin, deflection may be experienced under heavy loads.

The above illustrations are a few schematic suggestions for arrangements of RoundWay bearings and 60 Case LinearRace ways. The load directions of the bearings are indicated by arrows.

The first group (Figs. 1 through 4) depends on gravity to hold the carriage on the ways.

The second group shows arrangements which will carry loads in any direction. The first two figures (Figs. 5 and 6) are similar to the second two figures (Figs. 7 and 8), except for reverse orientation of horizontal load-carrying bearings.

All schematics on this page can be pre-loaded except Fig. 1. In the Fig. 1 arrangement, the maximum side load permitted is 50% of the applied vertical load on the Dual RoundWay bearing.

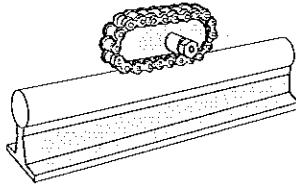
**IMPORTANT!**

A single RoundWay bearing does not resist side loads. Therefore, dual RoundWay bearings or the equivalent are always used in combination with single units.

## Inch – RoundWay Linear Roller Bearings

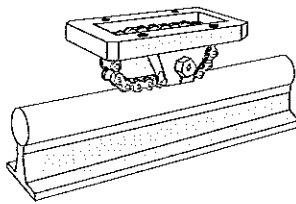
# RoundWay Linear Roller Bearings

for Continuously Supported Applications



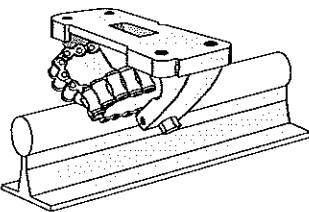
### RoundWay Linear Roller Bearing Type (Type A,B,C)

- Available in 1/2 through 3 inch diameters.
- Load capacity range between 970 and 24,000 lb<sub>r</sub>.
- Travel speeds up to 100 ft/s.
- Accelerations up to 450 ft/s<sup>2</sup>.
- Can be adjusted to compensate for variations in the mounting surface.
- Self-aligning in all directions.
- Designed to compensate for two 60 Case LinearRace ways that are slightly out of parallel
- Can be mounted in a custom housing.
- Available with a two piece seal that retains lubrication while protecting the bearing from the ingress of dirt or contaminants.



### RoundWay Linear Roller Bearing (Single Type)

- Available in 1/2 through 3 inch diameters.
- Load capacity range between 970 and 24,000 lb<sub>r</sub>.
- Travel speeds up to 100 ft/s.
- Accelerations up to 450 ft/s<sup>2</sup>.
- Can be adjusted to compensate for variations in the mounting surface.
- Self-aligning in all directions.
- Designed to compensate for two 60 Case LinearRace ways that are slightly out of parallel
- Should always be used in conjunction with RoundWay Dual version.
- Can be mounted in a custom housing.
- Available with a two piece seal that retains lubrication while protecting the bearing from the ingress of dirt or contaminants.
- Easily mounted to carriage with four mounting bolts.



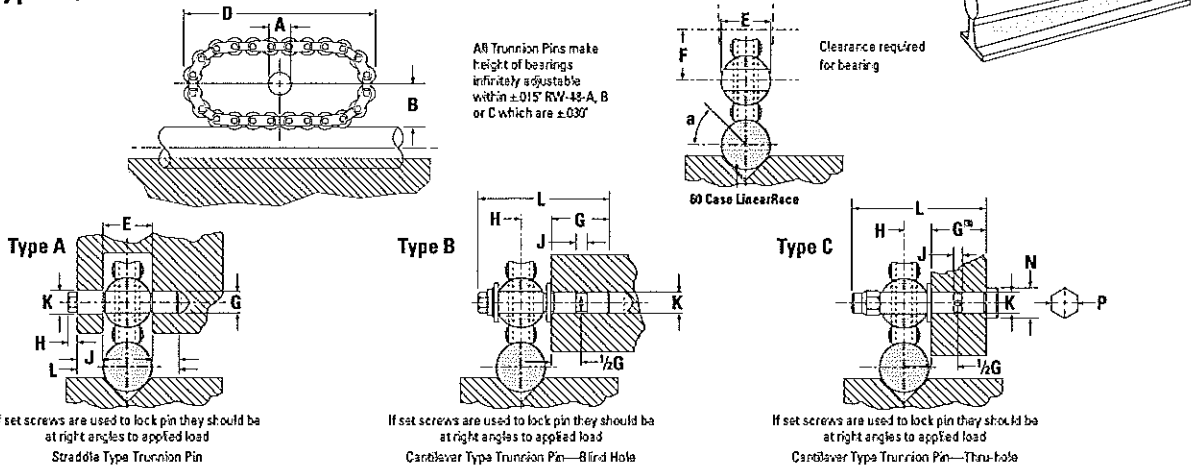
### RoundWay Linear Roller Bearing (Dual Type)

- Available in 1/2 through 3 inch diameters.
- Load capacity range between 1370 and 35,000 lb<sub>r</sub>.
- Travel speeds up to 100 ft/s.
- Accelerations up to 450 ft/s<sup>2</sup>.
- Can be adjusted to compensate for variations in the mounting surface.
- Self-aligning in all directions.
- Available with a two piece seal that retains lubrication while protecting the bearing from the ingress of dirt or contaminants.
- Easily mounted to carriage with four mounting bolts.

# Inch – RoundWay Linear Roller Bearings

## RoundWay Linear Roller Bearing

### Type A, B and C



### RoundWay Linear Roller Bearing (Type A, B and C) and 60 Case LinearRace (Dimensions in inches)

Part Number				Nom. Dia.	A $\pm.0005$ -.0000	B	C	D	E $\pm.001$	F	$\alpha$ deg	60 Case LinearRace Diameter d	60 Case LinearRace Maximum Length	60 Case Solid LinearRace Mass lb/in	Dynamic Load Capacity lb <sub>r</sub>
Bearing Type A	Bearing Type B	Bearing Type C	60 Case LinearRace												
RW8A	RW8B	RW8C	1/2 L PD	.500	.2500	.45	.63	2.38	.502	.56	50	.4995/.4990	168	.06	970
RW16A	RW16B	RW16C	1 L PD	1.000	.4688	.80	1.00	3.75	1.002	.94	50	.9995/.9990	180	.22	3020
RW24A	RW24B	RW24C	1 1/2 L PD	1.500	.7188	1.15	1.50	5.38	1.502	1.38	55	1.4994/1.4989	204	.50	6020
RW32A	RW32B	RW32C	2 L PD	2.000	.9688	1.50	2.00	7.38	2.002	1.75	55	1.9994/1.9987	204	.89	12360
RW48A	RW48B	RW48C	3 L PD <sup>(1)</sup>	3.000	1.5676	2.30	3.00	11.00	3.002	2.75	50	2.9992/2.9983	204	2.00	24000

RW-64-A

#### Trunnion Type A

Round Way Bearing Part Number	G	H	J	K $\pm.0000$ -.0005	L	Bearing Mass lb
RW8A	.2187	.19	.31	.2812	1.13	.30
RW16A	.4375	.25	.50	.5000	2.00	1.10
RW24A	.6875	.31	.63	.7500	2.75	3.10
RW32A	.9375	.38	.75	1.0000	3.50	7.3
RW48A	1.5000	.59	1.25	1.6250	5.53	24.0

RW-64-A

#### Trunnion Type B

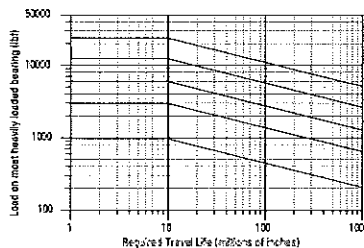
Round Way Bearing Part Number	G <sup>(2)</sup> $\pm.0000$ -.0005	H	J	K $\pm.0000$ -.001	L	Bearing Mass lb
RW8B	.75	.31	.13	.3105	1.63	.30
RW16B	1.25	.59	.19	.498	2.78	1.10
RW24B	1.75	.88	.25	.748	3.94	3.10
RW32B	2.25	1.13	.31	.998	5.06	7.70
RW48B	3.50	1.75	.50	1.623	8.00	24.80

#### Trunnion Type C

Round Way Bearing Part Number	G <sup>(2)</sup> $\pm.0000$ -.001	H	J	K $\pm.0000$ -.001	L	M	N	P Std. Hex across flats	Bearing Mass lb
RW8C	.719	.31	.13	.311	1.69	.22	.44	—	.30
RW16C	1.188	.59	.19	.498	2.88	.31	.75	—	1.10
RW24C	1.656	.88	.25	.748	4.13	.50	1.00	—	3.20
RW32C	2.094	1.13	.31	.998	5.25	.63	1.31	—	7.90
RW48C	3.063	1.75	.50	1.623	7.25	1.00	—	2.75	25.60

(1) Dynamic Load Capacity is based on 10 million inches of travel. (2) Thickness of mounting member.

### Load/Life Graph (Lines indicate limiting load for given RoundWay bearing)

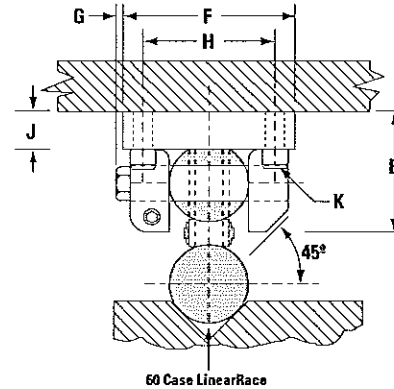
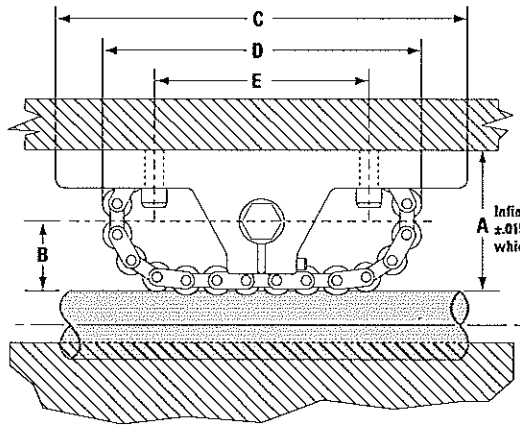
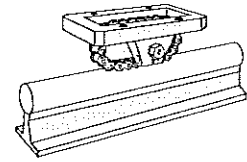


#### Determining RoundWay Bearing Size

The primary factors that influence the choice of bearing size are maximum load on a single RoundWay bearing and the required travel life. To determine the proper RoundWay bearing size enter the chart with the maximum load of the most heavily loaded bearing and the required travel life. Mark where the two lines intersect. All RoundWay bearing sizes that pass through or above and to the right of this point may be suitable for this application.

## Inch – RoundWay Linear Roller Bearings

### RoundWay Linear Roller Bearing (Single Type)

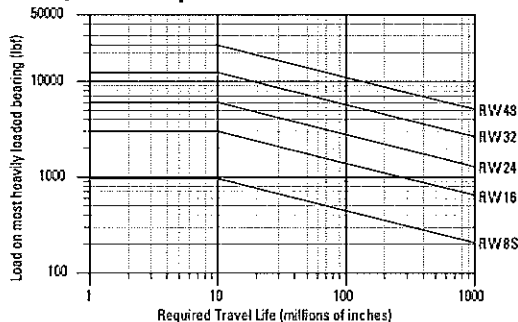


RoundWay Linear Roller Bearing (Single Type) and 60 Case LinearRace (Dimensions in inches)

Part Number		Nom. Dia.													60 Case LinearRace Diameter (d)	60 Case LinearRace Maximum Length	60 Case Solid LinearRace Mass lb/in	Bearing Mass lb	Dynamic Load Capacity lb
RoundWay Bearing	60 Case LinearRace		A	B	C	D	E	F	G	H	J	K	Bolt	Hole	L				
RW8S	1/2 LPD	.500	1.00	.45	3.0	2.38	1.50	1.25	.19	.94	.31	#6	.16	.88	.4995/.4990	168	.06	.50	970
RW16S	1 LPD	1.000	1.75	.80	5.0	3.75	2.50	2.13	.25	1.63	.50	#10	.25	1.50	.9995/.9990	180	.22	2.20	3020
RW24S	1 1/2 LPD	1.500	2.50	1.15	6.5	5.38	3.50	2.88	.31	2.13	.63	.31	.38	2.13	1.4994/1.4989	204	.50	5.60	6020
RW32S	2 LPD	2.000	3.25	1.50	8.5	7.38	4.50	3.63	.38	2.75	.75	.38	.44	2.88	1.9994/1.9987	204	.89	12.40	12360
RW48S	3 LPD	3.000	5.00	2.30	13.0	11.00	7.00	6.00	.50	4.25	1.25	.63	.69	4.25	2.9992/2.9983	204	2.00	48.00	24000
RW64S	4 LPD	4.000	6.50	3.00	17.0	14.88	9.00	7.75	.50	5.50	1.50	.75	.81	5.88	3.9988/3.9976	202	3.56	105.00	48000

(1) Dynamic Load Capacity is based on 10 million inches of travel.

### Load/Life Graph



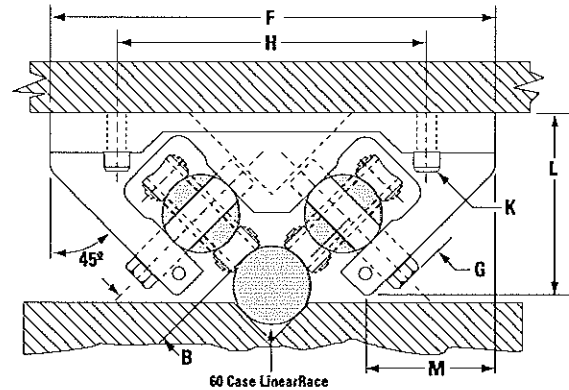
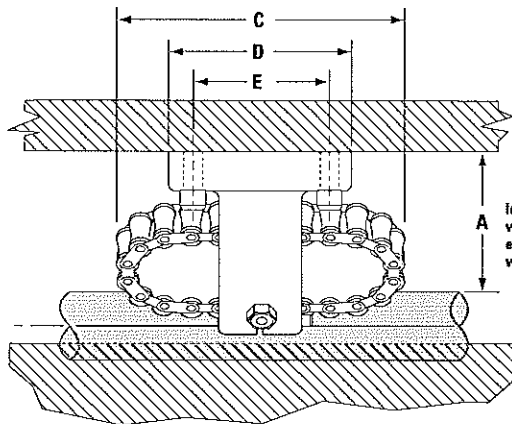
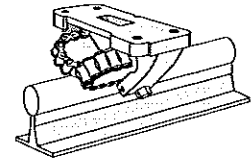
(Lines indicate limiting load for given RoundWay bearing)

#### Determining RoundWay Bearing Size

The primary factors that influence the choice of bearing size are maximum load on a single RoundWay bearing and the required travel life. To determine the proper RoundWay bearing size enter the chart with the maximum load of the most heavily loaded bearing and the required travel life. Mark where the two lines intersect. All RoundWay bearing sizes that pass through or above and to the right of this point may be suitable for this application.

## Inch – RoundWay Linear Roller Bearings

### RoundWay Linear Roller Bearing (Dual Type)

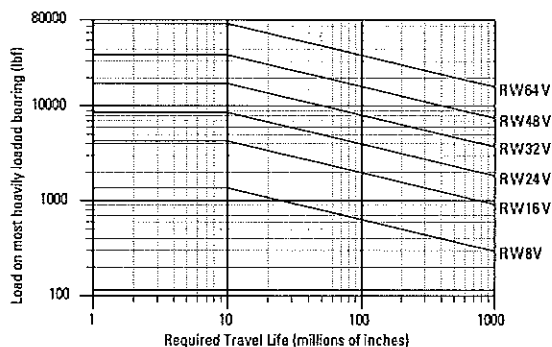


RoundWay Linear Roller Bearing (Dual Type) and 60 Case LinearRace (Dimensions in inches)

Part Number		Nom. Dia.	A	B	C	D	E	F	G	H	J	K		L	M	60 Case LinearRace Diameter d	60 Case LinearRace Maximum Length	60 Case Solid LinearRace Mass lb/in	Bearing Mass lb	Dynamic Load Capacity lb <sub>r</sub>
RoundWay Bearing	60 Case LinearRace											Bolt	Hole							
RW8V	1/2 LPD	.500	1.00	.45	2.38	1.39	1.00	3.00	.19	2.25	.31	#8	.19	1.38	.69	.4995/.4990	168	.06	1.10	1370
RW16V	1 LPD	1.000	1.75	.80	3.75	2.25	1.63	5.75	.25	4.0	.50	#10	.25	2.38	1.56	.9995/.9990	180	.22	4.90	4300
RW24V	1 1/2 LPD	1.500	2.50	1.15	5.38	2.75	2.00	7.88	.31	6.0	.63	.31	.38	3.38	2.13	1.4994/1.4989	204	.50	11.70	8600
RW32V	2 LPD	2.000	3.25	1.50	7.38	3.50	2.50	9.75	.38	7.5	.75	.38	.44	4.33	2.50	1.9994/1.9987	204	.89	25.20	17500
RW48V	3 LPD	3.000	5.00	2.30	11.00	5.50	4.00	15.50	.63	12	1.25	.63	.69	6.69	4.25	2.9992/2.9983	204	2.00	90.00	35000
RW64V	4 LPD	4.000	6.50	3.00	14.88	7.00	5.00	19.25	.75	15	1.50	.75	.81	8.63	5.00	3.9988/3.9976	204	3.56	193.00	70000

(t) Dynamic Load Capacity is based on 10 million inches of travel.

### Load/Life Graph



(Lines indicate limiting load for given RoundWay bearing)

#### Determining RoundWay Bearing Size

The primary factors that influence the choice of bearing size are maximum load on a single RoundWay bearing and the required travel life. To determine the proper RoundWay bearing size enter the chart with the maximum load of the most heavily loaded bearing and the required travel life. Mark where the two lines intersect. All RoundWay bearing sizes that pass through or above and to the right of this point may be suitable for this application.

## Inch – RoundWay Linear Roller Bearings

# Overhead Carriage for Log-Processing Machine

### Objective

Design overhead carriage system using RoundWay linear roller bearings mounted on 60 Case LinearRace ways.

### Solution

RoundWay linear roller bearings' high load capacity will be used to move heavy logs into and out of the band saws. The carriages shuttle back and forth on 100 foot long 60 Case LinearRace ways until the final cut is made.

### Products specified

- 2 - RW32V (RoundWay Linear Roller bearing Dual Type)
- 2 - RW32S (RoundWay Linear Roller bearing Single Type)
- 2 - 2 L PD CTL x 100 ft (60 Case LinearRace)

### Benefits

RoundWay linear roller bearings provide operating speeds up to 100 ft/s, optimizing productivity and minimizing cost. The RoundWay bearings' low coefficient of friction allows the use of smaller, less expensive drive motors, belts, linkages and gears. The seal keeps out wood chips and other contaminants and maximizes bearing life.

